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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,136	09/11/2003	Walter Galeski Rothschild	99999-008375	6908

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EXAMINER	
PALADINI, ALBERT WILLIAM	

ART UNIT	PAPER NUMBER
2125	

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/660,136	ROTHSCHILD, WALTER GALESKI	
	Examiner	Art Unit	
	Albert W. Paladini	2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1

Lines 3-5 recite "determining the relative contribution of the at least one independent variable to the dependent variable, and defining separate functions that each describe the contribution of a single independent variable to the dependent variable". Line 2 recites "at least one independent variable". If there is only one independent variable, then the relative contributions step has no meaning, since there are no other variables for comparison.

With respect to "defining separate functions that each describe the contribution of a single independent variable to the dependent variable", the claim does not identify the "single independent variable". If there is only one independent variable, it is clear what is meant. However, if there are more than on independent variable, the selected variable is not identified. The claim does not recite how to define the functions.

Claim 6

Lines 4-5 recite "identifying the independent variable that makes the largest contribution to the dependent variable as the first most important dependent variable". If there is only one independent variable, then the largest contribution step has no meaning, since there are no other variables for comparison. Thus some of the remaining steps will not make sense.

Lines 6-7 recite, "plotting the dependent variable versus transformations of the first most important independent variable to determine a function that provides a model having the best fit to the data." There are no steps reciting what the transformations are. Thus, it is not understood how the transformations result in a model having the best fit to the data.

Claim 18

Lines 5-6 recite, "determining which independent variable comprises the most significant contribution to the dependent variable". If there is only one independent variable, then the most significant contribution step has no meaning, since there are no other variables for comparison. Thus some of the remaining steps will not make sense.

Lines 8-9 recite, "plotting the values of the dependent variables against an initial set of selected functions". There are no steps reciting how these functions are selected. The rationale for selecting the functions must be consistent with the analytical approach. For example, if the chosen function is $F_{initial} = 0$ for all values of x_2, this step is not useful.

Plotting each variable against some random or arbitrarily selected function may result in a different result after determination of the residuals and the associated analysis.

Claim 19

Lines 3-6 recite ""determining the relative contribution of the at least one independent variable to the dependent variable and for defining separate functions that each describe the contribution of a single independent variable to the dependent variable. ". If there is only one independent variable, then the relative contributions step has no meaning, since there are no other variables for comparison.

With respect to "defining separate functions that each describe the contribution of a single independent variable to the dependent variable", the claim does not identify the "single independent variable". If there is only one independent variable, it is clear what is meant. However, if there are more than on independent variable, the selected variable is not identified. The claim does not recite how to define the functions.

Claim 24

Lines 4-5 recite "program code for identifying the independent variable that makes the largest contribution to the dependent variable". If there is only one independent variable, then the largest contribution step has no meaning, since there are no other variables for comparison. Thus some of the remaining steps will not make sense.

Lines 7-8 recite, "plotting the dependent variable versus transformations of the first most important independent variable to determine a function that provides a model having the best fit to the data." There are no steps reciting what the transformations are. Thus, it is not understood how the transformations result in a model having the best fit to the data.

Claim 36

Lines 6-7 recite, "determining which independent variable comprises the most significant contribution to the dependent variable". If there is only one independent variable, then the most significant contribution step has no meaning, since there are no other variables for comparison. Thus some of the remaining steps will not make sense.

Lines 9-10 recite, "plotting the values of the dependent variables against an initial set of selected functions". There are no steps reciting how these functions are selected. The rationale for selecting the functions must be consistent with the analytical approach. For example, if the chosen function is $F_{initial} = 0$ for all values of x_2, this step is not useful. Plotting each variable against some random or arbitrarily selected function may result in a different result after determination of the residuals and the associated analysis.

Appropriate correction and clarification are required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown (5121337).

This rejection is made by addressing those elements of the claims, which were understood in light of the 35 USC 112 rejections explained in paragraphs 1-3. Although specific sections of the reference were cited, all of the teachings of the reference are relevant to the rejection.

From (C52, L15) to (C54, L65), Brown discloses a computer implemented method and system to find a mathematical equation that fits a number of variables having one independent variable and at least one independent variable. The use of residuals and the Student t distribution to place confidence limits around the coefficients to find the most significant coefficients is commonly known to one of ordinary skill in the arts of statistics and experimental design.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Keller (6895411).

This rejection is made by addressing those elements of the claims, which were understood in light of the 35 USC 112 rejections explained in paragraphs 1-3. Although specific sections of the reference were cited, all of the teachings of the reference are relevant to the rejection.

From (C12, L27) to (C13, L46), Keller discloses a prediction model utilizing linear regression techniques and residuals of the independent variable to obtain a best fit mathematical equation for one dependent variable and at least one independent variables. The use of residuals and the Student t distribution to place confidence limits around the coefficients to find the most significant coefficients is commonly known to one of ordinary skill in the arts of statistics and experimental design.

Relevant Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

O'Brien (5506817) discloses a statistical filter which includes filters of different orders, a data correction means, a decorrelator, and a selector. It has iteration control means for controlling the statistical significance test means, an inter-residual correlation means to use the filter fit values to generate respective inter-residual correlation values.

DeVille (5519647) discloses an apparatus and method for generating an approximation function. DeVille uses residuals to determining an optimum boundary between two adjacent regression lines.

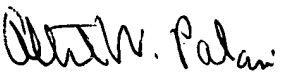
Crosswhite (6611726) discloses a time series method of predicting a value of a dependent variable using historical data by comparing the forecasted with the historical data, and using residuals or error values to optimize the forecasting equation.

Heching (6760632) discloses a computerized method for optimizing a business process using a constrained linear regression technique, where optimum coefficients of the independent variables are obtained by minimizing the residual noise.

8. Any inquiry concerning this communication or earlier communication from the examiner should be direct to Albert W. Paladini whose telephone number is (571) 272-3748. The examiner can normally be reached from 7:00 to 3:00 PM on Monday, Tuesday, Thursday, and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Leo P. Picard, can be reached on (571) 272-3749. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Albert W. Paladini
Primary Examiner
Art Unit 2125

April 25, 2006